

## HEAD WITH THIN AFM WITH HIGH POSITIVE MAGNETOSTRICTIVE PINNED LAYER

### ABSTRACT

The present invention overcomes the drawbacks and limitations described above by providing a magnetic head having a free layer, an antiferromagnetic layer spaced apart from the free layer, and an antiparallel (AP) pinned layer structure positioned between the free layer and the antiferromagnetic layer and having a net magnetic moment equal to about zero. The antiferromagnetic layer provides a coercivity that enhances pinning of the AP pinned layer structure.